

1 permission types may be set, the present invention permits for fine grain control over what
2 kind of access to the presence information is permitted.

3 The present invention may be embodied in other specific forms without departing
4 from its spirit or essential characteristics. The described embodiments are to be considered
5 in all respects only as illustrative and not restrictive. The scope of the invention is,
6 therefore, indicated by the appended claims rather than by the foregoing description. All
7 changes which come within the meaning and range of equivalency of the claims are to be
8 embraced within their scope.

9 What is claimed and desired to be secured by United States Letters Patent is:

1 1. In a computer network including a server computer system network
2 connectable to at least a plurality of client computer systems for which the server computer
3 system maintains presence information, a method of exercising fine grain control of access
4 to the presence information using a plurality of access permission types used for accessing
5 the presence information, the method comprising the following:

6 an act of the server computer system receiving a request from a client
7 computer system including an instruction to change an access permission status for
8 at least a subset of the plurality of client computer systems, the access permission
9 corresponding to one of the plurality of access permission types to the presence
10 information;

11 an act of the server computer system setting at least an entry in a data field
12 in response to the request, the entry representing the changed access permission
13 status; and

14 an act of the server computer system determining whether or not to allow
15 access to the presence information based on the entry in the data field.

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17 2. The method in accordance with Claim1, wherein the instruction to change
18 an access permission comprises an instruction affecting permission to view accurate
19 presence information.

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21 3. The method in accordance with Claim 1, wherein the instruction to change
22 an access permission comprises an instruction affecting permission to view any presence
23 information.

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1 4. The method in accordance with Claim 1, wherein the instruction to change
2 an access permission comprises an instruction to restrict the ability to act on presence
3 information.

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5 5. The method in accordance with Claim 4, wherein the instruction to restrict
6 the ability to act on presence information comprises an instruction to prohibit sending
7 messages to a computer system that corresponds to the presence information.

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9 6. The method in accordance with Claim 1, wherein the data field comprises
10 access permission fields in a database, wherein the database comprises the following for
11 each of the plurality of client computer systems:

12 an identifier field that identifies the client computer system;

13 a presence information field that represents the actual availability of the
14 client computer system;

15 a first access permission field that contains an access permission of a first
16 access permission type when the client computer system requests access to the
17 presence information;

18 a second access permission field that contains an access permission of a
19 second access permission type when the client computer system requests access to
20 the presence information; and

21 a manufactured presence information field to display to the client computer
22 system if the client computer system has permission to view presence information,
23 but does not have permission to view accurate presence information.

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7. A computer-readable medium having computer-executable instructions for performing the acts recited in Claim 1.

1 8. In a computer network including a server computer system network
2 connectable to at least a plurality of client computer systems for which the server computer
3 system maintains presence information, a method of exercising fine grain control of access
4 to the presence information using a plurality of access permission types used for accessing
5 the presence information, the method comprising the following:

6 an act of the server computer system receiving a request from a client
7 computer system including an instruction to change an access permission status for
8 at least a subset of the plurality of client computer systems, the access permission
9 corresponding to one of the plurality of access permission types to the presence
10 information; and

11 a step for the server computer system determining whether or not to allow
12 access to the presence information based on the instruction.

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14 9. The method in accordance with Claim 8, wherein the step for the server
15 computer system determining whether or not to allow access to the presence information
16 based on the instruction comprises the following:

17 an act of the server computer system setting at least an entry in a data field
18 in response to the request, the entry representing the changed access permission
19 status; and

20 an act of the server computer system determining whether or not to allow
21 access to the presence information based on the entry in the data field.

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10. The method in accordance with Claim 8, wherein the instruction to change an access permission comprises an instruction affecting permission to view accurate presence information.

11. The method in accordance with Claim 8, wherein the instruction to change an access permission comprises an instruction affecting permission to view any presence information.

12. The method in accordance with Claim 8, wherein the instruction to change an access permission comprises an instruction to restrict the ability to act on presence information.

13. The method in accordance with Claim 12, wherein the instruction to restrict the ability to act on presence information comprises an instruction to prohibit sending messages to a computer system that corresponds to the presence information.

14. A computer-readable medium having computer-executable instructions for performing the act and step recited in Claim 8.

1 15. In a computer network including a server computer system network
2 connectable to at least a plurality of client computer systems for which the server computer
3 system maintains presence information, a method of exercising fine grain control of access
4 to the presence information using a plurality of access permission types used for accessing
5 the presence information, the method comprising the following:

6 an act of a client computer system creating a request including an
7 instruction to change an access permission status for at least a subset of the
8 plurality of computer systems, the access permission corresponding to one of the
9 plurality of access permission types to the presence information; and

10 an act of a client computer system transmitting the request to the server
11 computer system.

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13 16. The method in accordance with Claim 15, wherein the instruction to change
14 an access permission comprises an instruction affecting permission to view accurate
15 presence information.

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17 17. The method in accordance with Claim 15, wherein the instruction to change
18 an access permission comprises an instruction affecting permission to view any presence
19 information.

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21 18. The method in accordance with Claim 15, wherein the instruction to change
22 an access permission comprises an instruction to restrict the ability to act on presence
23 information.

1 19. The method in accordance with Claim 18, wherein the instruction to restrict
2 the ability to act on presence information comprises an instruction to prohibit sending
3 messages to a computer system that corresponds to the presence information.
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5 20. The method in accordance with Claim 15, wherein the request comprises a
6 data structure stored in a computer-readable medium, wherein the data structure comprises:

7 a principle identifier field that identifies the client computer system to
8 which the access permission status is to apply;

9 a grant field that identifies any permission types that are to be granted to
10 the client computer system; and

11 a deny field that identifies any permission types that are to be denied to the
12 client computer system.
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14 21. The method in accordance with Claim 20, wherein the data structure further
15 comprises:

16 an authentication field identifying authentication methods that are to be
17 used when authenticating the client computer system to the server computer
18 system.
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20 22. A computer-readable medium having computer-executable instructions for
21 performing the acts recites in Claim 15.
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23. A computer-readable medium having stored thereon a data structure having a plurality of fields, the data structure comprising:

a principle identifier field that identifies a client computer system to which access control is to apply when accessing presence information;

a grant field that identifies any permission types that are to be granted to the client computer system when the client computer requests access to the presence information; and

a deny field that identifies any permission types that are to be denied to the client computer system when the client computer requests access to the presence information.

24. The computer-readable medium in accordance with Claim 23, wherein the data structure further comprises:

an authentication field identifying authentication methods that are to be used when authenticating the client computer system to a server computer system that maintains the presence information.